

IN THE CLAIMS:

The text of all pending claims are set forth below. Cancelled and withdrawn claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (previously amended), (cancelled), (withdrawn), (new), (previously added), (reinstated - formerly claim #), (previously reinstated), (re-presented - formerly dependent claim #) or, (previously re-presented).

1-7 (cancelled)

8. (previously presented) A radio communication system, comprising:

a base station to transmit first signals for first communication connections, the first signals being transmitted via an air interface using a first carrier frequency, and to transmit second signals for second communication connections, the second signals being transmitted via the air interface using a second carrier frequency;

a first radio network controller to communicate the first communication connections with the base station; and

a second radio network controller to communicate the second communication connections with the base station;

the base station comprising:

a common high-frequency component which processes signals of the first communication connections and signals of the second communication connections;

a first communication port and a second communication port, the first communication port being connected to the first radio network controller and the second communication port being connected to the second radio network controller, wherein

in the base station, the first communication connections are communicated via the first communication port and the second communication connections are communicated via the second communication port, and

the base station assigns the first and second communication connections respectively to the first and second communication ports on the basis of connection identifiers provided in data of the first and second communications connections.

9. (previously presented) A radio communication system according to Claim 8, wherein the high-frequency component has a send branch and a receive branch,

the send branch and the receive branch are connected to an antenna via a duplex filter to split send and receive bands,

the send branch comprises a power amplifier,

the receive branch comprises a pre-amplifier, and

the receive branch has a splitter which is connected to the output of the pre-amplifier and which has two broadband outputs which each cover the complete receive band.

10. (previously presented) A radio communication system according to Claim 9, wherein

the common high-frequency component comprises a first high-frequency branch and a second high-frequency branch, the first high-frequency branch being connected to a first antenna and the second high-frequency branch being connected to a second antenna,

the first high-frequency branch and the second high-frequency branch are essentially identical in structure and each have a duplex filter, a send branch with a power amplifier and a receive branch with a pre-amplifier and a splitter, and

signals with the first carrier frequency are sent to the send branch of the first high-frequency branch and signals with the second carrier frequency are sent to the send branch of the second high-frequency branch.

11. (previously presented) A radio communication system according to Claim 10, wherein

the send branch in each case has a combiner to which signals with the first carrier frequency and signals with the second carrier frequency are sent, and the output of which is connected to the input of the power amplifier.

12. (previously presented) A radio communication system according to Claim 8, wherein

the base station transmits signals to or receives signals from a plurality of sectors, and in which a common high-frequency component is provided in the base station for each sector.

13. (previously presented) A radio communication system according to Claim 8, wherein

the base station has a plurality of signal processing devices which are employed as a

pool, in order to process signals of first communication connections and signals of second communication connections.

14. (previously presented) A radio communication system according to Claim 8, wherein

the base station has a signal processing device in which dp programs are provided for processing the signals with the first carrier frequency and the signals with the second carrier frequency, the dp programs emulating two logical signal processing devices.

15. (previously presented) A radio communication system according to Claim 11, wherein

the base station transmits signals to or receives signals from a plurality of sectors, and in which a common high-frequency component is provided in the base station for each sector.

16. (previously presented) A radio communication system according to Claim 15, wherein

the base station has a plurality of signal processing devices which are employed as a pool, in order to process signals of first communication connections and signals of second communication connections.

17. (previously presented) A radio communication system according to Claim 16, wherein

the base station has a signal processing device in which dp programs are provided for processing the signals with the first carrier frequency and the signals with the second carrier frequency, the dp programs emulating two logical signal processing devices.

18. (previously presented) A radio communications system, comprising:
a first radio network controller to communicate first communication connections associated with a first carrier frequency;

a second radio network controller to communicate second communication connections associated with a second carrier frequency, different from the first carrier frequency; and

a base station to communicate the first communications connections with the first radio network controller and the second communications connections with the second radio network

controller, the base station transmitting both the first communication connections and second communication connections, the base station having a common high frequency component which processes signals for the first communication connections and signals for the second communication connections, the base station having a first communication port and a second communication port, the first communication port being connected to the first radio network controller and the second communication port being connected to the second radio network controller, wherein

in the base station, the first communication connections are communicated via the first communication port and the second communication connections are communicated via the second communication port, and

the base station assigns the first and second communication connections respectively to the first and second communication ports on the basis of connection identifiers provided in data of the first and second communications connections.

19. (previously presented) A radio communications system according to claim 18, wherein the base station has a common signal processing device to process both the first and second communication connections, the base station using software so that the common single processing device emulates at least two signal processing devices.

20. (previously presented) A base station for a radio communications system, comprising:

a communication unit to communicate first communications connections with a first radio controller and to communicate second communications connections with a second radio network controller, the base station transmitting signals of both the first communication connections and second communication connections, the signals of the first and second communication connections being transmitted via different wireless carrier frequencies;

a common high frequency component which processes signals of the first communication connections and signals of the second communication connections; and

a first communication port and a second communication port, the first communication port being connected to the first radio network controller and the second communication port being connected to the second radio network controller, wherein

in the base station, the first communication connections are communicated via the first communication port and the second communication connections are communicated via the

second communication port, and

the base station assigns the first and second communication connections respectively to the first and second communication ports on the basis of connection identifiers provided in data of the first and second communications connections.

21. (previously presented) A base station according to claim 20, further comprising a common signal processing device to process both the first and second communication connections, the base station using software so that the common single processing device emulates at least two signal processing devices.